Fiscal Year 2000-2002



ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND STRATEGIC BUSINESS PLAN

ENGINEERING FIELD ACTIVITY MEDITERRANEAN

ENGINEERING FIELD ACTIVITY CHESAPEAKE

ENGINEERING FIELD DIVISION, NORTH

ATLANTIC OPERATIONS

OICC NAVAL HOSPITAL, PORTSMOUTH, VIRGINIA

OICC NAPLES IMPROVEMENT INITIATE

TABLE OF CONTENTS

| FOREWORD | - 4 |
|---|------|
| Rear Admiral Johnson | |
| MISSION ,VISION AND GUIDING PRINCIPLES | - 6 |
| FOCUS AREAS | - 9 |
| People 10 | |
| Innovation 12 | |
| Clients 14 | |
| Operations 16 | |
| CORE CAPABILITIES | - 19 |
| MAJOR ACCOMPLISHMENTS | - 23 |
| APPENDIX (published separately) | |
| A. Effort Distribution Matrix B. Funding Distribution Matrix C. Products and Services Strategies D. Performance Metrics E. Annual Execution Plans | |
| | |

FOREWORD



DEPARTMENT OF THE NAVY

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1510 GILBERT ST
NORFOLK, VA. 23511-2599

TELEPHONE NO.

IN REPLY REFER TO

We live in an ever-changing world. In the past few years we've seen unprecedented change in our Navy and Marine Corps, with even more dramatic change just over the horizon. To remain a vital asset, Naval Facilities Engineering Command, Atlantic Division must change along with the clients we serve.

We believe the best way to predict the future is to create it. This Business Plan updates the course set two years ago by our first plan. The changes keep us aligned with the forces shaping our Navy and our many clients. I use *clients* rather than *customers* because this implies a partnership of two organizations working together to achieve mutual goals and objectives, and outcomes rather than a basic buyer-seller relationship.

The Atlantic Division Strategic Business Plan evolved from and fully supports the Naval Facilities Engineering Command's Strategic Plan. It provides a continuity of purpose for our components and focuses our collective effort on four principal areas of change - People, Innovation, Clients, and Operations.

As the future unfolds, our knowledge of the Navy, our professional Engineering competence and our innovative engineering-acquisition capabilities will keep us on course as a keystone of the Navy's shore establishment.

Michael R. Johnson

Rear Admiral, CEC, U.S. Navy

Commander



uality Performance ... Quality Results

Vincenza Guest House, Italy







Charette Health Care Center, Portsmouth, Virginia



Strategic Maritime Research Center, Newport, RI



White House Support

















5

MISSION and VISION



MISSION

Our Mission is to provide QUALITY facilities and services, proactive OPERATIONAL support and EXPERT Engineering services to our nation and its military forces.

We serve the Navy and Marine Corps team, unified commanders, DOD, and other federal agencies. Clients are our focus.

VISION

We are an integral, operational component of the United States Navy consistently recognized by our clients, contractors, and the public for our professionalism, leadership, integrity, and ability to provide expert engineering services in a timely manner.

We are sought out by our clients because we anticipate their changing requirements and we provide quality, affordable, best value solutions.

We offer stimulating and diverse employment, emphasizing empowerment, teamwork, sensible risk-taking, and the quality of our work environment. Our people exhibit ownership behavior.

We are the keystone of the Navy's shore establishment. We support and facilitate partnerships which emphasize trust, teamwork, mutual understanding and cooperation. Our ability to respond to emerging requirements emphasizes our long term commitment to provide facilities management support to the shore community.

We remain distinctive and advance our competitive advantage. We vigorously leverage technological advances to innovate our operation. We continuously improve our business processes.

GUIDING PRINCIPLES



Uphold the Navy's core values of Honor, Courage and Commitment

Value and respect each other

Communicate openly and honestly

Foster the professionalism of our workforce

Provide a safe and efficient work environment

Dedicate ourselves to technical and service excellence

Innovate and improve continuously; take sensible risks; challenge barriers

Create our future with proactive engagement

Listen to our clients and be accountable

Empower people and teams with responsibility and authority

Deliver expert solutions to support client operations

Preserve the public trust

Operate within an agile, global network

Shape resources proactively to accomplish core business workload

PRODUCTS and SERVICES

BASE DEVELOPMENT PLANNING

Facility Planning

ENVIRONMENTAL SERVICES

Environmental Planning

Environmental Compliance

Environmental Restoration

HOUSING MANAGEMENT

Housing Management

BASE OPERATIONS SUPPORT

Facilities Management

Utilities/Energy Management

CESE Management / WHE

Engineering Services

Consulting Services

CAPITAL IMPROVEMENTS

Project Review and Validation

Design (A&E)

Design (In-house)

Construction

REAL ESTATE SERVICES

Real Estate

Base Caretaker

CONTINGENCY ENGINEERING

Contingency Engineering Support / Military Ops





FOCUS AREAS

PEOPLE



Guiding Principles:

UPHOLD THE NAVY'S CORE VALUES OF HONOR, COURAGE AND COMMITMENT

VALUE AND RESPECT EACH OTHER

COMMUNICATE OPENLY AND HONESTLY

FOSTER THE PROFESSIONALISM OF OUR WORKFORCE

PROVIDE A SAFE AND EFFICIENT WORKPLACE

CURRENT:

A segmented professional workforce in transition toward more flexible, interdependent roles.

FUTURE:

A truly interdependent team fostering agile proactive behavior, innovation and a spirit of ownership in all our people. We foster job satisfaction through increased focus on leadership, communications and professional development.

PLAN

- Establish a core competency-based, workload-driven engineer-acquisition workforce, centered on the operational culture that is key to military success.
- Maximize our workforce's professional capabilities through aggressive community management.
- Enhance public affairs and communication effort throughout all command levels, both internally and externally.

FOCUS AREAS

STRATEGIES

Implement the NAVFAC Community Management Plan, focusing efforts on effective recruitment, rotational assignments, and workforce development through adequate investment in training, professional development programs, and emerging technologies.

Foster a safe and productive work environment.

Recognize superior employee/team performance and publicize successes.

Improve leadership by reinforcing desirable leadership practices (e.g. empowering, teaming, risk taking, communicating, listening, coaching and fostering workforce diversity).

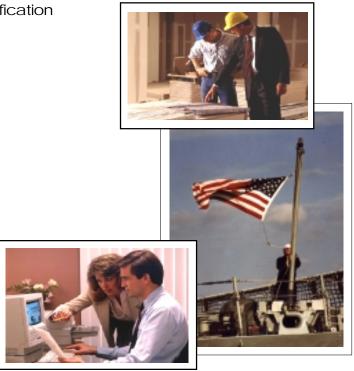
MEASURES OF SUCCESS

Correctly Sized and Shaped Workforce

Higher Professional Licensing and Certification Levels

Better Recruiting and Retention

Increased Workforce Development



INNOVATION



Guiding Principles:

DEDICATE OURSELVES TO TECHNICAL AND SERVICE EXCELLENCE

INNOVATE AND IMPROVE CONTINUOUSLY; TAKE SENSIBLE RISKS; CHALLENGE BARRIERS

CREATE OUR FUTURE WITH PROACTIVE ENGAGEMENT

CURRENT:

Diligently pursuing engineering innovation, but constrained by a confusing and inconsistent delivery system, the perception of a conservative and cumbersome acquisition process, inconsistent use of metrics and non-integrated Management Information System/Facility Information System (MIS/FIS)

FUTURE:

Widely recognized as expert, innovative providers of solutions through proactive delivery of core and emerging products and services which meet or exceed client requirements for peacetime, emergency and wartime operations.

PLAN

- Develop bases for 21st century Military forces.
- Implement agile, cost-effective and uniform delivery systems responsive to the client

FOCUS AREAS

STRATEGIES

Improve the quality, efficiency and timeliness of the acquisition planning and delivery processes through innovative acquisition tools.

Reduce base operation and maintenance costs by all means available including expeditious facility demolition, BRAC Bases transfers, environmental cleanups, and outsourcing initiatives.

Develop new strategies to optimize use of Navy land and facilities with federal agencies, industry and community.

Apply advanced information technology to reduce costs, improve management decisions, leverage resources, and improve information access for our clients.

Develop and implement common business practices that improve work execution.

Leverage Engineer Innovation Office.

Develop focused approach to innovation and information technology to set strategic initiatives, execute operational commitments, and sustain program execution.

MEASURES OF SUCCESS

Reduced facility acquisition cycle time

Shortened facility renovation cycle

Innovative real property management

Fielded enhanced technology ashore



CLIENTS



Guiding Principles:

LISTEN TO OUR CLIENTS AND BE ACCOUNTABLE

EMPOWER PEOPLE AND TEAMS WITH RESPONSIBILITY AND AUTHORITY

DELIVER EXPERT SOLUTIONS TO SUPPORT CLIENT OPERATIONS

CURRENT:

Improving client focus and introducing new products, services and approaches primarily using traditional tools, processes and strategies which continue to produce results, but often take too long and cost too much as perceived by our clients.

FUTURE

World-class agile client partnerships which clearly establishes LANTDIV as all clients' provider of choice.

PLAN

• Exceed client expectations.

STRATEGIES

Develop the right mix of products and services through a business approach that includes information gathering from external sources, analysis, strategy development, appropriate portfolio revisions and agile allocation of execution effort.

Develop innovative systems solutions to reduce the costs to operate, maintain and recapitalize facility assets.

FOCUS AREAS

Establish a client liaison capability to anticipate and understand expectations, operational requirements and resource capabilities, and improve product and service delivery.

Provide integrated contingency engineering and disaster preparedness capabilities in support of operational commanders by maintaining trained and ready personnel capable of real time response.

Use new authorities and innovative ventures to best service client requirements and desires.

Publicize our unique contributions to the Navy by effectively telling our story of new products, innovation, constant improvement and major successes.

MEASURES OF SUCCESS

Improved effectiveness

Reduced response times

Greater affordability

Increased operational capability ashore









OPERATIONS



Guiding Principles:

PRESERVE THE PUBLIC TRUST

OPERATE WITHIN AN AGILE, GLOBAL NETWORK

SHAPE RESOURCES TO ACCOMPLISH CORE BUSINESS WORKLOAD

CURRENT

We have successfully employed inter-component project teams, however capabilities are constrained by cumbersome processes and data systems.

FUTURE

A global, operations-driven Engineer enterprise with innovative business practices, an agile organizational structure, and a cutting edge information management system.

PLAN

 Deliver "on-time/on-target" engineering operations support to our clients whenever and wherever needed.

STRATEGIES

Cultivate global capabilities through a synergistic mix of military and civilian professional engineering assets, appropriate contract vehicles, historical knowledge and political experience.

FOCUS AREAS

Establish performance measurement systems and processes which allow rapid assessment of workload, resources and execution.

Initiate new processes which will decrease facility acquisition, operation and maintenance costs.

Integrate military, civilian and contractor contingency engineering assets into a single, credible, interdependent global effort

Develop resource management systems, common business practices, and process improvements that enhance the efficiency and effectiveness of decision-making and work execution.

Implement information technology that is accessible to our clients, that provides uniform and reliable data, and that is

MEASURES OF SUCCESS

Reduced total ownership cost ashore

Improved readiness and "Can Do" Engineer operations.

Greater Naval Construction Force Interoperability

Increased operating efficiency and balanced execution











CORE CAPABILITIES

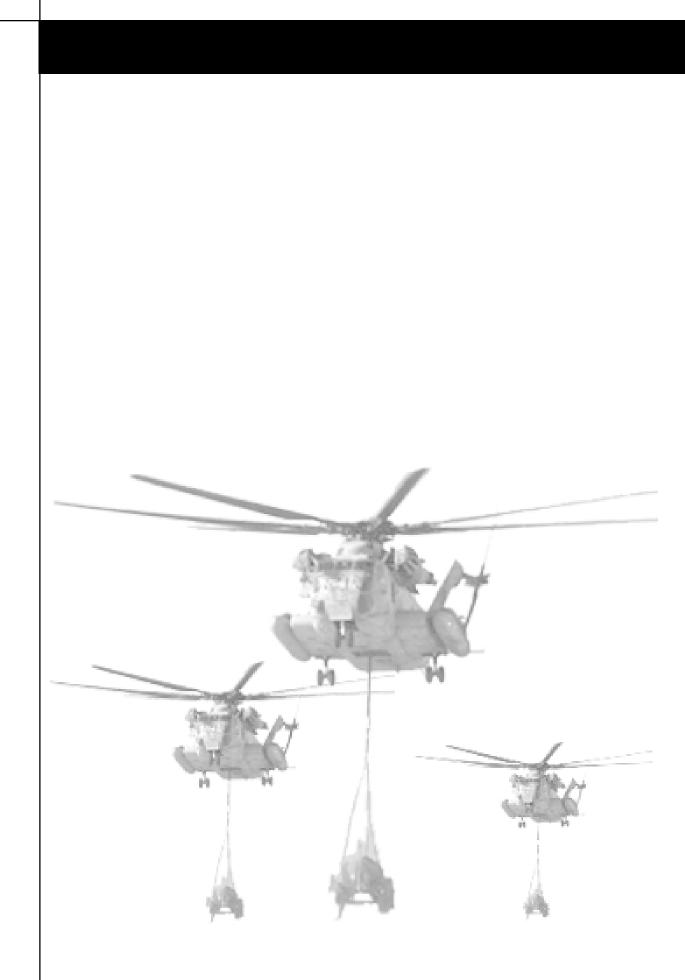


We accomplish the mission by employing core capabilities during Peacetime, Wartime, and Military Operations Other than War (MOOTW). These Core Capabilities form the broad base of the Global Products and Services our clients choose to enhance their mission capacity. Our Core Capabilities are summarized in the following table:

| | Capabilities | Peacetime | Wartime | MOOTW |
|-------|---|-----------|---------|---------------|
| l. | Facility Requirements Planning (including (NATO) A. Determine Shore Facilities Requirements; Planning/Budgeting/Management Support | * | * | |
| II. | Base Development Plans (including NATO) A. Proactive shore-based readiness support B. Cost management of infrastructure | * | | |
| III. | Mobilization Requirements Planning (including NATO) A. Identify facility deficiencies in support of theater OPLANS | | * | |
| IV. | Facility Mobilization Plans/Survivability/Sustainability A. Provide Base Complex mobilization master plans/respond to facility deficiencies | | * | * |
| V. | Real Estate Acquisition, In/Out Leasing A. Capability to expedite acquisitions to support world-wide operational need. | * | * | * |
| VI. | Navy Planning & Design Criteria A. Plan/design for military unique facilities | * | * | * |
| VII. | Design/Engineering Expertise (including NATO) A. Multi-disciplinary experts with knowledge/ intelligence on military/theater of ops; ready to go anywhere — anytime. | * | ❖ | ☆ |
| VIII. | Contracting A. Capability to expedite acquisitions to support world-wide operational needs | * | * | \Rightarrow |

CORE CAPABILITIES

| | Capabilities | Peacetime | Wartime | MOOTW |
|-------|---|-----------|---------|-------|
| IX. | Construction A. On-Site ROICC's world-wide B. Military force multiplier C. Seabee Support | ☆ | * | ☆ |
| X. | Environmental Management, Restoration & Compliance/NEPA A. Manage full environmental arena B. Contingency decontamination | ☆ | * | ☆ |
| XI. | Disaster Assessment & Response A. Multi-disciplinary professionals B. Seabee Support | * | | * |
| XII. | Statutory Compliance A. Legal packaging of "smart" engineering to ensure operational effectiveness | ☆ | * | * |
| XIII. | Transportation (CESE) Planning & Management A. CESE fleet inventory management B. Vehicle procurement oversight C. TRANSOPS & maint mgmt support to activities | ❖ | | ❖ |
| XIV. | Family Housing A. Overall program management B. Project validation & management C. "Extended Staff" for shore activities | ❖ | | |
| XV. | Bachelor Housing A. Overall program management | * | | |
| XVI. | Utilities & Energy Procurement and Management A. Engineering experts provide direct support to shore activities B. Long range utility planning C. Partnerships with local utilities D. Disaster recovery assistance | ❖ | | ☆ |
| XVII | Public Works Operations & Maintenance Support A. Broad range of expertise to support Installation Engineering B. Maintenance planning services C. Facility support contract prep D. Budget preparation/review E. Facilities inspections F. Disaster recovery assistance | ❖ | ❖ | ❖ |





MAJOR PROJECTS

OICC Naples

At nearly \$600 million, the Naples Improvement Initiative (NII), the Navy's largest Quality of Life program, is dramatically improving living and working conditions for the approximately 10,000 U.S. personnel (military, civilian and dependents) in the Naples area.

NII corrects some of the worst conditions in the world for Navy families where existing facilities are scattered and undersized, and are subject to sudden catastrophic failure from seismic activity. Military families in this area also suffer from a high cost of living, traffic congestion, utility problems, security concerns, and excessive travel time to and from school.

The first part of the project, begun in 1990, relocates operational and bachelor support facilities from Agnano, a Naples suburb, to the airport at Capodichino. This Military



Construction program includes administrative facilities, a new command and control center, warehouses, aviation support, and parking facilities. Capodichino will also support unaccompanied personnel with bachelor quarters, dining facilities, a limited medical/dental facility, and Morale, Welfare and Recreation (MWR) facilities.

The Naples Support Site is a self-contained, modern lease-construct complex north of Naples, easily accessible by a modern highway. The Support Site includes family housing, schools, a hospital, MWR facilities, and a commissary and exchange. Families live in safe neighborhoods with energy-sufficient homes. Recreational opportunities, schools and shopping are all within walking distance.

The Support Site will be constructed in four major increments. The first increment, under

construction since early 1996, includes 860 housing units, two schools, and recreation fields, plus the land for the entire project. The first families moved in during May 1997. The elementary and high schools opened in August 1997. Increment II, now under construction, includes Village Center/Community Support Facilities. Increment III includes the Health Care Facility and Increment IV will include Recreational/Retail Buildings. Completion is currently planned for 2001.

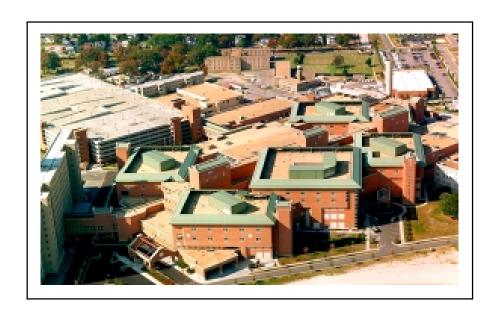


OICC Naval Hospital

Naval Medical Center, Portsmouth, Va. is the oldest operating hospital in the U.S. Navy. Architect John Haviland, of Philadelphia, designed and supervised construction of the original hospital. Work began on April 2, 1827 and a portion of the building was occupied in July 1830. In 1960 a new 778-bed high rise building was opened to accommodate the ever-increasing demands of the hospital.

In 1988 a comprehensive study of the long-term military health care needs in Hampton Roads recommended a new hospital as the solution to many deficiencies with the existing Portsmouth Naval Hospital. The study evaluated seven options ranging from building a completely new hospital, to contracting out all medical care for an estimated 420,000 beneficiaries to the private sector. The decision to build a new facility was based on several factors. The Navy would spend about \$40 million less each year to provide health care in an upgraded hospital than it would to rely on the private sector. Second, physical limitations and layout of the existing high-rise building, which was designed to provide in-patient care, could not be overcome through renovation to be compatible with the current emphasis on outpatient care. Third, construction of a new facility would be least disruptive to maintaining current hospital services.

The \$400 million re-development project, begun in 1990, adds one million square feet of medical treatment space in a new acute care facility. During the re-development, 39 buildings were demolished and were replaced by various new facilities including a parking garage, public works building, gymnasium and a central energy plant. Ninety percent of the site utilities were replaced. The \$167 million acute care facility, named the Charette Health Care Center, was completed Oct. 31, 1998. It was dedicated April 30, 1999 after several months of equipment installation. Building 1 and portions of Building 215 will be renovated to provide logistical support and administrative functions.



EFA Chesapeake



The \$70 million Naval Air Systems Command Relocation project at NAS Patuxent River, Md. includes 460,000 square feet of office space, a 900-car parking structure, significant site work, and infrastructure upgrades including new roads. It accommodates 2,200 employees relocated from Crystal City. The building provides flexible, technologically advanced work spaces and its' five-story atrium provides natural light and views for the majority of the building's occupants.



The three building \$20 million complex for the Navy's Ceremonial Guard includes a 250-person, four-story dormitory; a two-story dining hall; and a drill hall/gymnasium sited to create a series of campus-like courtyard. Conceived by the late Admiral

Boorda, this project was completed only three years after initial inception by employing a design-build project strategy to expedite the award and construction processes. This is one of the Navy's first dormitory projects that meets the new military housing standards designed to improve the quality of life for Sailors featuring private bedrooms, increased space and quality furnishings for each resident.

The \$21 million Sanger Quadrangle at the Washington Navy Yard is the Navy's first "green" building. It is the new headquarters for the Naval Facilities Engineering Command, the Office of the Judge Advocate

General and the Naval Legal Services Command. To preserve the historic appearance of the 140 year old complex, a completely independent structure was built inside, keeping the exterior facade as close to the original as possible while creating 156,000 square feet of modern office space. Using a "green" approach, livability of the building was improved while impact on the environment was minimized.



EFD North



The Strategic Maritime Research Center is a state-of-the-art war gaming facility at the Naval War College in Newport, R.I. It will contain a full range of multi-media presentation capabilities and the latest computer networking technologies. Construction completion is scheduled for June 1999 and the facility will be ready to support Global War Gaming in September.

The Defense Logistics Agency, NSS Philadelphia, a \$24 BRAC project, provided exterior improvements to three buildings and renovated 350,000 square feet of office space at NSS Philadelphia. The project improved the quality of life for DLA employees with bathroom renovations, new high-density file systems, permanent office partitions, improved lighting, and new modular system furniture. The project also improved energy efficiency with new windows, dropped acoustical ceiling, and new HVAC with DDC systems. Telephone and fiber optic cabling were



installed to each of the 2000 workstations. The key to the success of this project was the coordination and cooperation with the client and contractor. The project was phased so the client could occupy all other sections/floors of a building while the work progressed

Nomans Land Island is a former bombing range associated with NAS South Weymouth, Mass. The 628-acre island, located 2.7 miles from Martha's Vineyard, has been transferred from the Navy to the Department of the Interior for use as a Fish & Wildlife Service as a game preserve. Northern Division managed ordnance debris removal and environmental remediation on the ecologically-sensitive island. The \$2.9 million cleanup was highlighted by inter-agency cooperation by the Navy, DOI, EPA, and the Commonwealth of Massachusetts.



EFA Med

The Mineo housing project is a Lease-Construct Acquisition that will provide 404 housing units for the families of Naval Air Station Sigonella, Sicily, Italy. Located 19 miles from NAS II (the operational complex at Sigonella) this 62-acre site will include a mix of 3 and 4 bedroom units, a community center, and associated utilities infrastructure. Construction is well underway, with the first phase of 140 units scheduled to be accepted on September 30, 1999.

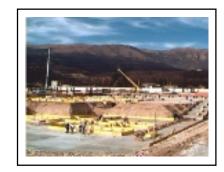




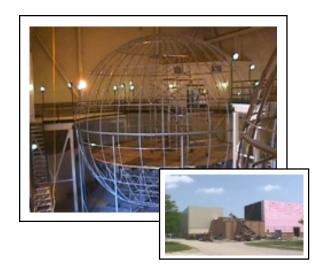
A team from several Navy engineering organizations combined their efforts to improve quality of life for Sailors in the Mediterranean. The project team, which included Navy civilian engineers, Seabees and a civilian contractor, completed construction of a sewage treatment plant on time and within budget. The sewage treatment plant corrects health and environmental inadequacies, and provides a sewage disposal system for U.S. Navy ships making port

calls at Souda Bay, Crete in the eastern Mediterranean. Prior to completion of this project the base had no facilities capable of processing wastewater from aircraft carriers and other large ships. An Urgent Minor Military Construction Project funded at a cost of \$2.7 million provided for construction of a wastewater treatment plant, collection system and holding tank at the Marathi Pier (K14), pumping station and connections from Piers K10 and K12, and a sewage outfall into Souda Bay. The project was submitted on Sept. 2, 1997 and approved on Nov. 12, 1997. Construction on the \$2.7 million project began on Feb. 10, 1998. Test operations began the week of September 14 and the first ship, USS Supply (AOE 6), arrived at Souda Bay and connected to the plant on October 1.

Engineering Field Activity Mediterranean is managing 28 North Atlantic Treaty Organization funded design and construction projects for the U.S. Air Force at Aviano AB, Italy. Known as Aviano 2000, the effort is a combination of United States and Italian projects totaling more than \$440 million in new construction. Phase I includes the base exchange/commissary, as well as roads and utilities upgrades. Phase II contains the new school, dorms, and dining and club facilities. Phase III will encompass a fitness center, medical facility, passenger and freight terminal, community center, youth center, fuel dock, theater, and other support facilities.



LantOps



A \$20 million project at Naval Air Station Oceana includes the renovation of the NAMTRAGRULANT Building, construction of a two-story addition for F/A-18 flight simulators, a Corrosion Control Hangar, a Hazardous Materials Building, a concrete aircraft apron, and an asphalt access road. The work is to support the BRAC relocation of F/A-18 squadrons from NAS Cecil Field.

The \$10 million Oily Wastewater Treatment Facility at the Craney Island Fuel Facility in Portsmouth provides for state of the art biological treatment of oily wastewater supplied by Naval activities throughout the Hampton Roads area. From the Norfolk Naval Station, bilge water from ships and other sources is provided to the plant through a connecting pipeline, which runs under the Elizabeth River. Oily wastewater from other Naval activities is transferred to the plant by barge or truck. The plant is capable of treating approximately 400,000 gallons



of oily wastewater per day and concentrations are reduced from up to 10,000 parts per million to a level suitable to return to the environment. This new process replaces the old chemical treatment process that was used that no longer meets State environmental discharge criteria. Without this new facility, oily wastewater would have to be sent to private facilities for treatment at a significant cost to the Navy.



The \$16.5 million Controlled Industrial Facility at Naval Station Norfolk is a 42,000 square foot industrial facility for support of nuclear submarines and carriers. Its on-time completion allowed the Navy to decommission a submarine tender and save \$55 million per year in operating expenses.

LantOps

Marine Corps Base Camp Lejeune, N.C. officially opened the Greater Sandy Run Area (GSRA) in October 1998. In 1992 the Atlantic Division's Real Estate Division began the process of purchasing 41,100 acres west of U.S. Highway 17 south of Jacksonville, N.C. for expansion of training areas. The acquisition included 166 privately-owned parcels. The majority of the property was acquired from



International paper Co. in a single parcel. The \$41 million purchase was the largest real estate acquisition undertaken by LantDiv since World War II. Follow-on military construction (MILCON) projects, worth \$35 million, have developed firing and maneuver ranges for infantry, tanks and armored vehicles, roads, utilities, and support facilities. Additional MILCON projects are underway or planned for award. Until GSRA was developed, Marines had to travel to Army facilities at Fort Bragg and Fort Knox to get training.



A state-of-the-art Advanced Wastewater Treatment Plant was officially opened at Marine Corps Base Camp Lejeune in November 1998. The \$80 million project was the largest construction contract ever accomplished by ROICC Camp Lejeune. Built in phases over 18 months, the project actually finished several months early and ensured the base met mandatory wastewater treatment compliance requirements established by the State of North Carolina. Phase one of the project, begun in 1994,

constructed 35 miles of pipeline and shut down two existing treatment plants. This removed discharges to the most nutrient-sensitive waters of the upper New River, from shell fishing waters of the lower New River and removed a discharge to the Intra-coastal Waterway. Phases two and three, which ran concurrently, built the new treatment plant and closed four other plants. The new plant is the most cutting-edge treatment plant in the Department of Defense. It incorporates two unique treatment processes, a Biological Nutrient Removal system and a Autothermal Thermophyllic Aerobic Digestion system that allows land disposal of liquid sludge from the plant. Further, the wastewater discharge is disinfected by ultraviolet light instead of Chlorine to further protect the sensitive shell fish environment in the New River.